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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,602	02/01/2006	Reese Randolph Smith III		1904

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EXAMINER	
WILLIAMS, MARK A	

ART UNIT	PAPER NUMBER
3673	

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03/15/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,602	SMITH III, REESE RANDOLPH	
	Examiner	Art Unit	
	MARK A. WILLIAMS	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collet et al., US Patent 6,811,118 or US Patent Application Publication 2003/016442A1, in view of Schott, US Patent 3,504,406, or Derrien, US Patent 5,288,037, or Jacobson, US Patent 2,881,021.

Regarding claims 1-7 and 10, Collet provides a locking mechanism for engaging and retaining a movable member 50, characterized in that the mechanism includes a hook member 12 mounted for angular displacement about a first axis such that the hook member is movable into and out of retaining engagement with the movable member, a latch member 14 mounted for angular displacement about a second axis parallel with the first axis, the latch member having a portion thereof spaced from the second axis, which can be located to prevent movement of the hook member out of retaining engagement, and first and second actuators (100 and

200) operable to rotate the latch member about the second axis such that the portion is movable to a position where it does not prevent movement of the hook member out of retaining engagement, and that the second actuator is a rotary actuator and includes what is broadly considered a cam 16 arranged for rotation about a third axis parallel to the second axis and located to engage a part of the latch member. The part engageable by the cam is the portion spaced from the second axis. The first actuator includes inherently includes a solenoid at 103. The second actuator includes an electric motor 201. The mechanism includes a spring 20 connected to the hook member to urge it out of retaining engagement with the movable member. As best understood, the spring is connected between the hook member and the latch member so as to urge the portion of the latch member into engagement with the hook member. The hook member has a hook formation on one side of the first axis and that it is engaged by the portion of the latch member on an opposite side of the first axis. The movable member is a capture pin of aircraft landing gear.

Collet provides the claimed invention except explicit teaching of the hook member includes an angled contact surface configured to contact the portion of the latch member such that a force applied by the contact surface to the portion of the latch member rotates the portion into engagement with the hook member and limits

a rotation of the hook member, as claimed. However, such structure is generally old and well known in the art. Each of Schott, Derrien, and Jacobbson teach a version of this concept, for the purpose of providing effective means of securing a hook or hook-like member again rotation, thereby retain the hook/hook-like member in a latched state as desired. It would have been obvious for one of ordinary skill in the art to have modified the device of the Collet to include such structure, as generally taught by each of Schott, Derrien, and Jacobbson, for the purpose of providing effective means for retaining the hook member in a latched state as desired.

Regarding claim 8, Collet provides a roller 26 on the second actuating element and a cam 28 on the portion of the latch member, as oppose to a roller on the portion of the latch member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device in this way, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Such a modification is considered an art recognized equivalent structural modification, and would have functioned at least equally as well.

Regarding claim 9, although not explicitly disclosed in Collet, the examiner serves Official Notice that it is old and well known to utilize sensor means for

detection of the position of latch/lock components. It would have been obvious to modify the device in this way for the purpose of providing means of detection the positioning of latch/lock components, as known in the art.

Response to Arguments

1. Applicant's arguments with respect to the claims of record have been considered but are moot in view of the new ground(s) of rejection.

Applicant has not argued the examiner's serving of Official Notice. It is therefor the position of the Office that applicant concedes the subject matter referred to in the Official Notice as Applicant's Admitted Prior Art, and the Official Notice is thereby made Final.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK A. WILLIAMS whose telephone number is (571)272-7064. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark A. Williams/
Examiner, Art Unit 3673
/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3673